

# **EXHIBIT 18**

08/ 324443

**TOWNSEND and TOWNSEND KHOURIE and CREW**  
 Steuart Street Tower  
 One Market Plaza  
 San Francisco, CA 94105  
 (415) 543-9600



**PATENT APPLICATION**  
**COMMISSIONER OF PATENT AND TRADEMARKS**  
 Washington, D. C. 20231

Sir:

Transmitted herewith for filing is the

- ☒ patent application of  
☐ design patent application of  
☐ continuation-in-part patent application of

Inventors: Michael Doyle, David Martin and Cheong Ang

For: **EMBEDDED PROGRAM OBJECTS IN DISTRIBUTED HYPERMEDIA SYSTEMS**

Enclosed are:

- ☒ 10 sheets of ☐ formal ☒ informal drawings.  
☐ An assignment of the invention to \_\_\_\_\_  
☐ A ☐ signed ☐ unsigned Declaration & Power of Attorney.  
☒ A ☐ signed ☒ unsigned Declaration.  
☐ A Power of Attorney.  
☐ A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.  
☐ A certified copy of a \_\_\_\_\_ application.  
☐ Information Disclosure Statement under 37 CFR 1.97.  
☒ Appendix A; Appendix B

**In view of the Unsigned Declaration as filed with this application and pursuant to 37 CFR §1.53(d), Applicant requests deferral of the filing fee until submission of the Missing Parts of Application.**

**DO NOT CHARGE THE FILING FEE AT THIS TIME.**

Atty. Docket No. 02307-553

"Express Mail" Label No. TB380892941US

Date of Deposit October 17, 1994

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D. C. 20231

By

Sunil Dutt  
 Sunil Dutt

Telephone:  
 (415) 543-9600  
 APPNOFEE.TRN 12/92

Charles J. Kulas  
 Charles J. Kulas  
 Reg. No.: 35,809  
 Attorneys for Applicant



PATENT APPLICATION

EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA SYSTEMS

Inventors:

Michael Doyle,  
David Martin,  
Cheong Ang

Assignee:

University of California  
1320 Harbor Bay Parkway, Suite 150  
Alameda, CA 94502

TOWNSEND and TOWNSEND KHOURIE and CREW  
Steuart Street Tower, 20th Floor  
One Market Plaza  
San Francisco, California 94105  
(415) 543-9600



EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA SYSTEMS

Notice Regarding Copyrighted Material

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The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure as it appears in the Patent and Trademark Office file or records, but otherwise reserves all copyright rights whatsoever.

BACKGROUND OF THE INVENTION

This invention relates generally to manipulating data in a computer network, and specifically to retrieving, presenting and manipulating embedded program objects in distributed hypermedia systems.

Computer networks are becoming increasingly popular as a medium for locating and accessing a wide range of data from locations all over the world. The most popular global network is the Internet with millions of computer systems connected to it. The Internet has become popular due to widely adopted standard protocols that allow a vast interconnection of computers and localized computer networks to communicate with each other. Computer systems connected to a network such as the Internet may be of varying types, e.g., mainframes, workstations, personal computers, etc. The computers are manufactured by different companies using proprietary hardware and operating systems and thus have incompatibilities in their instruction sets, busses, software, file formats and other aspects of their architecture and operating systems. Localized computer networks connected to the Internet may be incompatible with other computer systems and localized networks in terms of the physical layer of communication including the specific hardware used to



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8-6-96

TOWNSEND and TOWNSEND and CREW LLP

By

*El Suleim*

CB  
2317

PATENT

Attorney Docket No. 02307I-553

#5/A  
BH  
10-9-96

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA  
SYSTEMS

Examiner: D. Dinh

Art Unit: 2317

AMENDMENT

RECEIVED  
AUG 20 1996  
GROUP 2300

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Responsive to the Office Action mailed May 6, 1996,  
please amend the above identified application as follows:

IN THE CLAIMS:

Please cancel claim 16.

Please amend the following claims:

1. (Amended) A method for running an application program in a computer network environment, comprising:  
providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;  
executing, at said client workstation, a browser application, that parses a distributed hypermedia document to identify text formats included in the distributed hypermedia document and for responding to predetermined text formats to initiate processes specified by the text format;

MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 20

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

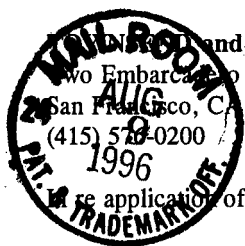
Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael E. Woods", is written over a yellow rectangular background.

Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200  
Fax (415) 576-0300  
CEK:db  
s:\02307I\553\amend.01

Amendment



TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, CA 94111-3834  
(415) 578-0200

In re application of MICHAEL D. DOYLE et al.

Appln. No. 08/324,443

Filed 10/17/94

Group Art Unit 2317

For EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA SYSTEMS

THE ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

- ☐ Enclosed is a petition to extend time to respond.
- ☒ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.
- ☒ A document entitled *USC Mercury Project: Interface*
- If any extension of time is needed, then this response should be considered a petition therefor.
- The filing fee has been calculated as shown below:

(Col. 1)		(Col. 2)		(Col. 3)	SMALL ENTITY		OR	OTHER THAN A SMALL ENTITY	
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDIT. FEE		RATE	ADDIT. FEE
TOTAL	56*	MINUS	43**	= 13	x11 =	\$143		x22 =	\$
INDEP.	8*	MINUS	4***	= 4	x39 =	\$156		x78 =	\$
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM					+125 =	\$		+250 =	\$
					TOTAL ADDIT. FEE	\$299	OR	TOTAL	\$

- \* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
- \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
- \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.  
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

☐ No fee is due.

Please charge Deposit Account No. 20-1430 as follows:

- ☒ Claims fee \$ 299.00
- ☒ Any additional fees associated with this paper or during the pendency of this application.

TWO extra copies of this sheet are enclosed.

Atty. Docket No. 02307I-055300US

Date August 6, 1996

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Assistant Commissioner for Patents  
Washington, D. C. 20231.

Date: 8-6-96

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AUG 20 1996  
GROUP 2300

TOWNSEND and TOWNSEND and CREW LLP

Michael E. Woods / Reg. No.: 33,466  
Attorneys for Applicant

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Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

PATENT

Attorney Docket No. 023071-553

TOWNSEND and TOWNSEND and CREW LLP

By

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA  
SYSTEMS

Examiner: D. Dinh

Art Unit: 2317

AMENDMENT

OFFICIAL

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Responsive to the Office Action mailed May 6, 1996,  
please amend the above identified application as follows:

IN THE CLAIMS:

Please cancel claim 16.

Please amend the following claims:

1. (Amended) A method for running an application program in a computer network environment, comprising:  
providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;  
executing, at said client workstation, a browser application, that parses a distributed hypermedia document to identify text formats included in the distributed hypermedia document and for responding to predetermined text formats to initiate processes specified by the text format;

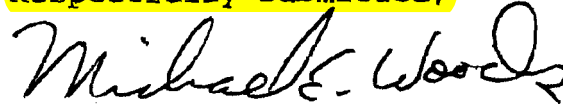


MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 20

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,



Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
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01/08/97

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415 576 0300

TTC

002/026

#8

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Fax No.: 1-703-308-5359  
Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

1-8-97

Attorney Docket No. 023071-553

PATENT

TOWNSEND and TOWNSEND and CREW LLP

By

*Ernest Rodas*

OFFICIAL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA  
SYSTEMS

Examiner: D. Dinh JAN 08 1997

Art Unit: 2317

RESPONSE AFTER FINAL

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The following is responsive to the Office Action mailed  
December 13, 1996:

REMARKS

Claims 1-15 and 17-56 are now pending in the  
application. Reexamination and reconsideration are requested.

Claims 1 and 44 are rejected under 35 U.S.C. §103 as  
being unpatentable over Vetter "Mosaic and the World-Wide Web"  
and further in view of Hansen "Andrew as a Multiparadigm  
Environment for Visual Languages."


In claim 1, the distributed hypermedia document  
includes an embed text format that specifies the location of an  
object external to the distributed hypermedia document and that  
specifies type information utilized by the browser to identify  
and locate an executable application external to the distributed  
hypermedia document. The browser invokes the executable  
application to display and process the object within the browser  
window.

MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 4

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,

  
Charles E. Krueger

Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
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Fax (415) 576-0300  
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02/19/97

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415 553 0300

TOWNSEND SF

001/002

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Fax No.: 1-703-308-5359  
Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

2/19/97

TOWNSEND and TOWNSEND and CREW LLP

By Charles Krueger

Attorney Docket No. 023071-553

FEB 19 1997

# 10

(not)

BT

2-20-97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA  
SYSTEMS

Examiner: D. Dinh

Art Unit: 2317

COMMUNICATION

OFFICIAL

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The following is responsive to the Office Action mailed  
January 24, 1997:

REMARKS

It is believed that the Office Action contains a minor  
typographical error in the first paragraph in referring to  
applicant's Rule 131 Declaration. The reference which was the  
subject matter of that declaration was Vetter "Mosaic and the  
World-Wide Web," not Wynne as stated in the Office Action.

Accordingly, this communication is submitted to call  
the examiner's attention to this error so that the record can be  
corrected.

Further, this to confirm that one of the co-inventors,  
Michael Doyle, and his attorney, Charles Krueger, will appear at  
the examiner's office for an interview at 9:00 A.M. on Monday,  
February 24, 1997.

MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 2

PATENT

If the Examiner has any comments or questions, please  
telephone the undersigned at (415) 576-0200.

Respectfully submitted,



Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
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Fax (415) 576-0300  
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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
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Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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08/324,443 10/17/94 DOYLE M 02307553  
08/324,443

B3M1/0226

TOWNSEND AND TOWNSEND  
KHOURIE AND CREW  
STUART STREET TOWER  
ONE MARKET PLAZA  
SAN FRANCISCO CA 94105

EXAMINER

DINH, D

ART UNIT

PAPER NUMBER

2317

11

DATE MAILED:

02/26/97

### EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) Michael Doyle (3) Thomas Lee  
(2) Charles Krueger (4) Dung Dinh

Date of Interview 2/24/97

Type: ☐ Telephonic ☒ Personal (copy is given to ☒ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☒ Yes ☐ No. If yes, brief description:

How HyperNet work and different from the present invention.

Agreement ☒ was reached with respect to some or all of the claims in question. ☐ was not reached.

Claims discussed: All

Identification of prior art discussed: Wynee

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

1) HyperNet is a compiled system, 2) Tag in document to activate external program (delayed binding),  
3) display and process by the external application within Browser's controlled window.

Applicant's argument is persuasive to overcome the Hypernet ref. The claims are distinguished over  
the prior art of record.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

Examiner's Signature

70826 U.S. PTO



06/05/97

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Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

June 2, 1997

TOWNSEND and TOWNSEND and CREW LLP

By [Signature]

#14/B

PATENT

Attorney Docket No. 02307I-553

BA

6-19-97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN)  
DISTRIBUTED HYPERMEDIA )  
SYSTEMS )

Examiner: D. Dinh.

Art Unit: 2317

AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Responsive to the Office Action mailed March 26, 1997,  
please amend the above identified application as follows:

IN THE CLAIMS:

Please cancel claim 6-15, 17-43, and 49-56.

Please amend the following claims:

1. (Twice Amended) A method for running an application program in a computer network environment, comprising:  
providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;  
executing, at said client workstation, a browser application, that parses a first distributed hypermedia document to identify text formats included in [the] said distributed hypermedia document and for responding to predetermined text formats to initiate processing specified by said text formats;  
utilizing said browser to display, on said client workstation, at

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31

MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 27

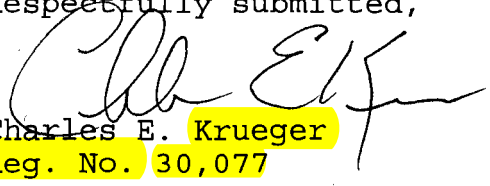
PATENT

707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,

  
Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200  
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Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

10-31-97

PATENT

Attorney Docket No. 02307I-553

TOWNSEND and TOWNSEND and CREW LLP

By Irene Rodas

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL D. DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: EMBEDDED PROGRAM OBJECTS IN  
DISTRIBUTED HYPERMEDIA  
SYSTEMS

)  
) Examiner: D. Dinh

)  
) Art Unit: 2317

)  
) COMMUNICATION

Assistant Commissioner for Patents  
Washington, D.C. 20231

REMARKS

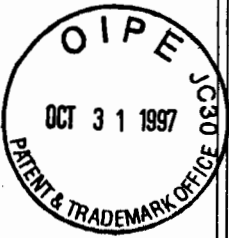
In the Office Action mailed June 25, 1997, the claims  
pending in the present application were rejected over Koppolu  
reference (U.S. Patent No. 5,581,686 "the '686 patent").

The '686 patent was filed June 6, 1996 and is a  
continuation of parent Appln. No. 229,264, filed April 15, 1994,  
which is a C-I-P of grandparent Appln. No. 984,868 filed  
December 1, 1992.

The file history of the grandparent application has  
been examined and it has been determined that Figs. 32-56 and  
Secs. 6.0 to 6.4.4 of the '686 patent were added as new matter in  
the C-I-P parent application.

Attached hereto is a declaration and evidence proving  
that the claimed invention was conceived and reduced to practice  
prior to the filing date of the C-I-P parent application.  
Accordingly, Figs. 32-56 and Secs. 6.0 to 6.4.4 of the '686  
patent are not prior art.

Further, this to confirm that one of the co-inventors,  
Michael Doyle, and his attorney, Charles Krueger, will appear at



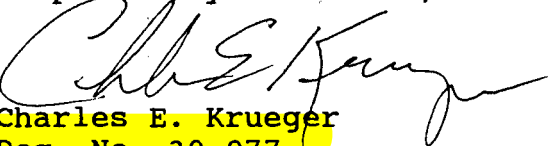
MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 2

PATENT

the examiner's office for an interview at 9:00 A.M. on Thursday,  
November 6, 1997.

If the Examiner has any comments or questions, please  
telephone the undersigned at (415) 576-0200.

Respectfully submitted,



Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200  
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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKETT NO.
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08/ 324443

EXAMINER
----------

D. DINH

ART UNIT	PAPER NUMBER
----------	--------------

2317

16

DATE MAILED:

### EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) DUNG DINH (3) \_\_\_\_\_  
(2) CHARLES KRUEGER (4) MICHAEL DOYLE

Date of interview 11/6/97

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☒ Yes ☐ No. If yes, brief description: \_\_\_\_\_

document OLE object showing "window overlaid" in document

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: all

Identification of prior art discussed: all

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: cause of claim invention

"automatic invoke of external application to provide interactive control". Applicant argues the prior art does not teach or suggest this feature.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

  
Examiner's Signature



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Washington, D.C. 20231,  
on

12-23-97

TOWNSEND and TOWNSEND and CREW LLP

By V. Bullock

#17  
ETD  
PATENT

Attorney Docket No. 023071-553  
1/22/98

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	
	)	
MICHAEL D. DOYLE et al.	)	Examiner: D. Dinh
	)	
Application No.: 08/324,443	)	Art Unit: 2317
	)	
Filed: 10/17/94	)	PETITION TO EXTEND TIME UNDER
	)	<u>37 CFR §1.136(a)</u>
For: EMBEDDED PROGRAM OBJECTS IN)	)	
DISTRIBUTED HYPERMEDIA	)	
SYSTEMS	)	

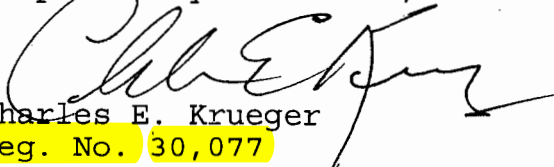
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicant petitions the Assistant Commissioner of Patents to extend the time for response to the Office Action dated August 25, 1997 for one month, from November 25, 1997 to December 25, 1997. An appropriate response to the Office Action is enclosed herewith.

Please charge \$110, pursuant to 37 CFR §1.17, to Deposit Account No. 20-1430. Please charge any additional fees or credit overpayment to the above deposit account. This petition is submitted in triplicate.

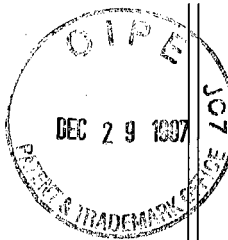
Respectfully submitted,

  
Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200  
Fax (415) 576-0300  
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Assistant Commissioner for Patents,  
Washington, D.C. 20231,  
on

12-23-97

TOWNSEND and TOWNSEND and CREW LLP

By V. L. Sullivan

Attorney Docket No. 023071-553

*P. J. Gray*  
#19 *Revised* PATENT  
1/24/98

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	
MICHAEL D. DOYLE et al.	)	Examiner: D. Dinh
Application No.: 08/324,443	)	Art Unit: 2317
Filed: 10/17/94	)	<u>RESPONSE</u>
For: EMBEDDED PROGRAM OBJECTS IN)	)	
DISTRIBUTED HYPERMEDIA	)	
SYSTEMS	)	

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The following is responsive to the Office Action mailed August 25, 1997, setting a response period expiring on November 25, 1997.

REMARKS

Claims 1,2, 5, and 44, 45, 48 are rejected over the Applicants' disclosed prior art (Mosaic + HTTP + HTML + "World Wide Web), referred to herein as "Mosaic," in view of Koppolu et al. The Examiner is thanked for extending the courtesy of an interview to one of the inventors, Professor Doyle, and his attorney, Mr. Krueger.

THE EXAMINER'S REASONING REJECTING CLAIM 1

The Examiner states that Mosaic does not have embed text format specifying an external object which automatically invokes an external application to execute and enable interactive processing within a portion of the browser controlled window.

MICHAEL D. DOYLE et al.  
Application No.: 08/324,443  
Page 31

PATENT

Claim 4 recites the additional steps over Claim 3  
"wherein said additional instructions for controlling said  
controllable application reside on said client workstation."


None of the claimed references show this feature. This  
feature produces the additional surprising and unexpected results  
of enabling a client and network server system to be self-  
contained on the client workstation.

Claims 44-48 are apparatus claims of the same scope as  
claims 1-5 and are thus allowable for the reasons recited above.

In view of the foregoing, Applicants believe all claims  
now pending in this application are in condition for allowance.  
The issuance of a formal Notice of Allowance at an early date is  
respectfully requested.

If the Examiner believes a telephone conference would  
expedite prosecution of this application, please telephone the  
undersigned at (415) 576-0200.

Respectfully submitted,

  
Charles E. Krueger  
Reg. No. 30,077

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San Francisco, California 94111-3834  
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PO BOX AF, Assistant Commissioner for Patents,  
Washington, D.C. 20231,

on 2-25-98  
TOWNSEND and TOWNSEND and CREW LLP  
By [Signature]

AF/GAU 2782 \$  
#20  
27X S. 3rd  
3/24/98  
PATENT

Attorney Docket No. 02307I-553

305 9655

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	
DOYLE et al.	)	Examiner: D. Dinh
Application No.: 08/324,443	)	Art Unit: <del>2317</del> 2756
Filed: 10/17/94	)	PETITION TO EXTEND TIME UNDER
For: EMBEDDED PROGRAM OBJECTS IN)	)	37 CFR §1.136(a)
DISTRIBUTED HYPERMEDIA	)	
SYSTEMS	)	

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicants petition the Assistant Commissioner of Patents to extend the time for response to the Office Action dated August 25, 1997 for two months, from December 25, 1997 to February 25, 1998. A one-month extension of time was previously granted.

An appropriate response to the Office Action in the form of a Notice of Appeal is enclosed herewith.

Please charge \$840, pursuant to 37 CFR §1.17, to the Deposit Account No. 20-1430. Please charge any additional fees or credit overpayment to the above Deposit Account. This Petition is submitted in triplicate.

Respectfully submitted,

[Signature]  
Charles E. Krueger  
Reg. No. 30,077

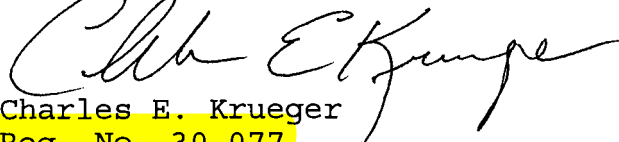
TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200 Fax (415) 576-0300  
CEK:db

DOYLE et al.  
Serial No.: 08/324,443  
Page 2

PATENT

charge any additional fees or credit overpayment to the  
above Deposit Account. This Notice is submitted in  
triplicate.

Respectfully submitted,



Charles E. Krueger  
Reg. No. 30,077

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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/324,443	10/17/94	DOYLE	M 02307553

020350 LM21/0330  
TOWNSEND AND TOWNSEND AND CREW  
TWO EMBARCADERO CENTER EIGHTH FLOOR  
SAN FRANCISCO CA 94111

EXAMINER	
DINH, D	
ART UNIT	PAPER NUMBER
2756	2322

03/30/98

DATE MAILED:

NOTICE OF ALLOWABILITY

PART I.

- ☒ This communication is responsive to paper filed 12/29/97
- ☐ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
- ☒ The allowed claims are 1-5, 44-48
- ☐ The drawings filed on \_\_\_\_\_ are acceptable.
- ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received. ☐ not been received. ☐ been filed in parent application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_.
- ☒ Note the attached Examiner's Amendment.
- ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
- ☒ Note the attached Examiner's Statement of Reasons for Allowance.
- ☒ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
- ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
- ☒ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
  - ☒ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. 4. CORRECTION IS REQUIRED.
  - ☐ The proposed drawing correction filed on \_\_\_\_\_ has been approved by the examiner. CORRECTION IS REQUIRED.
  - ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
  - ☒ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

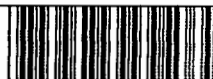
Attachments:

- ☒ Examiner's Amendment
- ☒ Examiner Interview Summary Record, PTOL-413
- ☒ Reasons for Allowance
- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Citation, PTO-1449

- ☐ Notice of Informal Application, PTO-152
- ☐ Notice re Patent Drawings, PTO-948
- ☐ Listing of Bonded Draftsmen
- ☐ Other

*[Signature]*  
NIMU

#24

**Interview Summary**Application No.  
**08/326,443**Applicant(s)  
**Doyle et al**Examiner  
**Dung Dinh**Group Art Unit  
**2756**

All participants (applicant, applicant's representative, PTO personnel):

(1) Dung Dinh (3) \_\_\_\_\_(2) Charles E. Krueger (4) \_\_\_\_\_Date of Interview Jan 26, 1998Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☐ applicant's representative).Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:Agreement ☒ was reached. ☐ was not reached.Claim(s) discussed: 1 and 44

Identification of prior art discussed:

None

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

The applicant agreed to amend "display window" in line 28 of claim 1 to --display area-- to distinguish that it is an area within the hypermedia document that displays the object and not a separate window. The same amendment was made to claim 44, line 39. Further in line 17 of claim 44, "said by the text formats" was amended to read --by said text formats--.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☒ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.  
Frank J. Asta  
Dung Dinh**FRANK J. ASTA  
SUPERVISORY PATENT EXAMINER  
GROUP 2700**

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

① D.S.

LOC,  
2762

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Washington, D.C. 20231,  
on

Attorney Docket No. 02307-553

PATENT

TOWNSEND and TOWNSEND and CREW LLP

By

*[Signature]*

*#26*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

DOYLE et al.

Application No.: 08/324,443

Filed: 10/17/94

For: DISTRIBUTED HYPERMEDIA  
METHOD FOR AUTOMATICALLY  
INVOKING EXTERNAL  
APPLICATION PROVIDING  
INTERACTION AND DISPLAY OF  
EMBEDDED OBJECTS WITHIN A  
HYPERMEDIA DOCUMENT (as  
amended)

) Examiner: D. Dinh

) Art Unit: 2756

) Batch No.: C26

) LETTER TO OFFICIAL  
) DRAFTSPERSON

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Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to the Notice of Allowability dated March 30, 1998, applicants submit nine sheets of formal drawings to be made of record in the above-identified case.

Respectfully submitted,

*[Signature]*

Charles E. Krueger  
Reg. No. 30,077

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8th Floor  
San Francisco, California 94111-3834  
(415) 576-0200  
Fax (415) 576-0300  
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